

# POSSIBLE BENEFITS FROM ESTABLISHING SURVEILLANCE FOR BIOTERRORIST EVENTS

- Earlier detection of a release of a biological agent, soon enough to implement prevention/control measures or guide treatment, so as to reduce mortality and/or morbidity (e.g. smallpox vaccination, antibiotic chemoprophylaxis against anthrax, etc.)
- Facilitation of determining the population at risk as the result of a release of a biological agent, after the release has been detected.
- Strengthening of the public health infrastructure and its ability to detect and respond to other, naturally-occurring infectious disease threats (e.g., West Nile virus)



# **EXAMPLES OF SURVEILLANCE SYSTEMS/APPROACHES**

- **Febrile, respiratory illness**
- **Vesicular rashes**
- **Gram positive rods**
- **OTC anti-diarrheal medications**
- **Unexplained illnesses**





## **RESOURCES NEEDED TO ESTABLISH SUCH SYSTEMS**

- Trained personnel and support staff
- Computer/communications hardware
- Software
- Access to data in a timely fashion





# **SELECTED CHALLENGES TO IMPLEMENTING SURVEILLANCE FOR BIOTERRORIST EVENTS**

- Which syndromes to monitor?
- In what settings, facilities to collect data?
- Who collects the data?
- How to have the data available with minimal delays?
- Who should analyze the data?
- How to analyze the data?
- When/how to respond to “blips”?





# **CALIFORNIA EMERGING INFECTIONS PROGRAM**

- **Population-based surveillance in Alameda, Contra Costa, and San Francisco counties**
- **CDC-funded**
- **Separate, dedicated non-health department staff**
- **Provides high quality data to the health departments and reduces work burden on their staff, but does not provide training to health department staff**





## REASONS CEIP (AND OTHER SUCH PROJECTS) ARE ADMINISTERED SEPARATELY

- Ease of hiring and retaining well-qualified staff
- Ease of travel
- Ease and “rapidity” of administrative functions





# **LOCAL/STATE HEALTH DEPARTMENT PROBLEMS THAT ARE UNLIKELY TO BE RESOLVED BY THE INFUSION OF FEDERAL FUNDS TO THOSE AGENCIES**

- Inadequate staffing
- Inadequate salaries that make it difficult to hire and retain well-qualified staff, particularly physicians, nurses, microbiologists, and computer/information technology experts, who are all in high demand elsewhere





# **LOCAL/STATE HEALTH DEPARTMENT PROBLEMS THAT ARE UNLIKELY TO BE RESOLVED BY THE INFUSION OF FEDERAL FUNDS TO THOSE AGENCIES (CONTINUED)**

- Inadequate staff support
- Poor infrastructure/physical plant
- Lack of opportunities for continuing education
- Bureaucratic headaches (e.g. travel freezes, hiring freezes, other restrictions)



# **PUBLIC HEALTH TRAINING IN CALIFORNIA**

- **Outside of California, there is only 1 School of Public Health west of Houston, Texas (University of Washington)**
- **California has 1 private and 3 public Schools of Public Health (Loma Linda, UCB, UCLA, and SDSU)**
- **Budgets, number of faculty FTE, and number of students for UCB and UCLA were set at the University of California, systemwide level in the past, but are largely controlled now by the individual campuses**



# **PUBLIC HEALTH TRAINING IN CALIFORNIA**

- **In the 1990's, UCLA attempted to close/dis-establish its School of Public Health**
- **Currently, UCB plans to demolish the School of Public Health and in its place build a new biosciences building, with only laboratory-based (and perhaps a few other) SPH faculty to be in the new building. The remainder of SPH will be put in an antiquated building across the street, that formerly held the University of California systemwide headquarters**



# TRAINING CAPACITY OF CALIFORNIA'S PUBLIC UNIVERSITY SCHOOLS OF PUBLIC HEALTH AND COMPARISON STATES

State	Population	# of State-funded PH Faculty FTE	# of PH Faculty FTE/10 <sup>6</sup> Population	# of PH students	# of PH Students/ 10 <sup>6</sup> Population
Washington	5,900,000	37	6.3	550	93
Michigan	9,000,000	120	12.1	800	81
North Carolina	8,000,000	112	14	1242	155
California (UCB, UCLA, SDSU)	33,900,000	131	3.9	1494	44





# IMPEDIMENT TO EXPANDING PUBLIC HEALTH TRAINING IN CALIFORNIA

- Inadequate number of faculty FTE's
- Inadequate space
- Lack of financial support for students
- Bureaucratic obstacles to part time students/Continuing education activities